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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,296	12/22/2000	Tal I. Lavian	061473 0270180	2616

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EXAMINER	
LEE, ANDREW CHUNG CHEUNG	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/747,296	LAVIAN ET AL.	
	Examiner	Art Unit	
	Andrew C. Lee	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because numbers, letters, reference characters and legends for Figs 1 to 6 are difficult to read clearly. Numbers, letters, and reference characters must measure at least 0.32 cm (1/8 inch) in height. They should not be placed in the drawing so as to interfere with its comprehension. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- Pages 1 to 28, line numbering should be incorporated in each page, or the paragraphs of the specification should be individually and consecutively numbered using Arabic numerals, so as to umambiguously identify each paragraph. The number should consist of at least four numerals enclosed in square brackets, including leading zeros (e.g. [0001]).
- Page 1, the Applicants' names are not required and should be deleted.
- Page 5, line 13, "0baseT transmission lines" should be corrected as "10baseT transmission lines"; and line 14 "00baseF transmission lines" should be corrected as "100baseF transmission lines".
- Claims 1, 13 and 20, " a queue having a first priority" and " a queue having a second priority" should be corrected as " priority queue" and " best effort queue" so as in consistent with the subject matters disclosed in the specification.
- For Fig. 4, the Office would request the applicant to clarify the statue of IP flow for block 125 in "No" condition. The arrow indicates the flow is not finished and implies more procedures flow and terminate.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 13, 20, 2, 3, 23, 4, 5, 21, 6, 22, 7, 8, 9, 10, 12, 14 15, 17, 19, 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffman et al. (U.S. 6094435).

Regarding Claims 1, 13 and 20, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" as a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60) comprising: monitoring types of packet traffic received in the packet forwarding device (recited "keeps track of the addresses of the end stations that transmit a packet showing up on one of ports" as monitoring types of packet traffic received; Fig. 1, column 7, lines 6 – 10, recited " address independent classes" as types of packets; column 13, lines 14 – 29); determining whether a type of packet traffic received in the packet forwarding device is a predetermined type (recited "parse an incoming packet to determine various characteristics about the packet, including the type of the protocol being used and the source and destination(s)" as determining whether a type of packet traffic received in the packet forwarding device is a predetermined type ; column 7, lines 48 – 58); and when the type of packet traffic is the predetermined type (recited " after the router has determined what actions are necessary on the packet" as when the type of packet traffic is the predetermined type; column 7, lines 63 – 64), automatically performing at least one of changing assignment of the predetermined type of packet traffic from a queue having a first priority to a queue having a second priority (recited "generates the queue selection" as changing assignment of the predetermined type of packet traffic from a queue , Q1 low priority queue as best effort queue (second priority) and Q3 as high priority queue (first priority); Fig. 8, column 19, 63 – 67, column 20, lines 1 – 23), dropping

packets of the predetermined type in the packet traffic (recited "the queue Qi having the lowest priority, overflows, then the packets are discards" as dropping packets of the predetermined type in the packet traffic, column 22, lines 46 – 50, 56 – 63), copying packets of the predetermined type in the packet traffic, and diverting packets of the predetermined type in the packet traffic.

Regarding Claim 2, Hoffman et al. disclose the limitation of packet traffic is based on its source (recited "contains an entry for the layer 2 source transmitting the packet" and "source address" as packet traffic is based on its source; column 11, lines 19 – 32, 44 – 47).

Regarding Claims 3 and 23, Hoffman et al. disclose the limitation of the method of claimed wherein sources of packet traffic including a source MAC address (recited "an entry for the layer 2 source transmitting the packets" and "the values of the MAC address of the source" as sources of packet traffic including a source MAC address; column 11, lines 19 – 25, lines 44 – 47).

Regarding Claim 4, Hoffman et al. disclose the limitation of the method of claimed wherein sources of packet traffic including a source VLAN (recited " a virtual LAN (VLAN) identifier" as sources of packet traffic including a source VLAN; column 9, lines 27 – 33, column 11, lines 47 – 54).

Regarding Claims 5, 21, Hoffman et al. disclose the limitation of the method of claimed wherein packet traffic is based on its ingress port (recited "input ports" as ingress port or source port; column 9, lines 15 – 33).

Regarding Claims 6 and 22, Hoffman et al. disclose the limitation of packet traffic is based on its destination (recited "an entry indicating the port of the destination address" as packet traffic is based on its destination; column 11, lines 39 – 41).

Regarding Claim 7, Hoffman et al. disclose the limitation of the method of claimed wherein the destination of packet includes a destination MAC address (recited " output port need not make any modifications to the header except for inserting its MAC address" as destination of packet includes a destination MAC address; column 15, lines 65 – 67).

Regarding Claim 8, Hoffman et al. disclose the limitation of the method of claimed wherein the destination of packet includes a destination VLAN (recited "a VLAN requires an outgoing tag" as destination of packet includes a destination VLAN; column 16, lines 23 – 26, lines 36 – 40).

Regarding Claim 9, Hoffman et al. disclose the method of claimed wherein the type of packet traffic is based on its egress port (recited "output port" as egress port; column 10, lines 18 – 31).

Regarding Claim 10, Hoffman et al. disclose the limitation of the method of claimed wherein the type of traffic is based on its protocol (recited " ARP, RSVP" as protocol; column 13, lines 14 – 29).

Regarding Claim 12, Hoffman et al. disclose the limitation of the method of claimed wherein the protocol of traffic includes HTTP (recited " http" as the protocol of traffic includes HTTP; column 13, lines 62 – 65).

Regarding Claim 14, Hoffman et al. disclose the limitation of the method of claimed wherein the environmental conditions meeting the predetermined criteria include time of day (recited "monitored one at a time" and "the scheme detects misbehavior of flows over a period of time" as environmental conditions meeting the predetermined criteria include time of day; column 22, lines 8 – 16).

Regarding Claim 15, Hoffman et al. disclose the limitation of the environmental conditions meeting the predetermined criteria including network configuration changes (recited "allows the switching element to responds to varying network situation" as the environmental conditions meeting the predetermined criteria including network configuration changes; column 13, lines 14 –19).

Regarding claim 17, Hoffman et al. disclose the limitation of the method of claimed wherein the network configuration changes include network congestion (recited "congestion may occur in the network element" as network configuration changes include network congestion; column 21, lines 37 – 41).

Regarding Claim 19, Hoffman et al. disclose the limitation of the environmental conditions meeting the predetermined criteria including line use of high level protocols (recited "address independent classes" as environmental conditions meeting the predetermined criteria; "ARP, RSVP" or "http" as high level protocols; column 13, lines 14 – 29, lines 62 – 65).

Regarding Claim 24, Hoffman et al. disclose the limitation of the method of claimed wherein at least some of the traffic patterns are based on specified IP flows (recited "when the class indicates that the packet is of a class hardware routable IP" as the traffic patterns are based on specified IP flows; column 13, lines 20 – 29; column 14, lines 29 – 31).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. (US 6094435) in view of Brinnand et al. (US 6430616 B1).

Regarding Claim 16, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" as a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60). Hoffman et al. do not disclose explicitly the method claimed the network configuration changes including network failures. Brinnand et al. disclose the limitation of the method of claimed herein the network configuration changes including network failures (recited "causes of failure and other malfunctions in computers and other devices connected to the network" as network configuration changes including network failures; Fig. 2, column 4, lines 2 – 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoffman et al. to include the method of claimed herein the network configuration changes including network failures such as that taught by Brinnand et al. in order to facilitate the efficient logging of management information including information regarding events which occur in the network (as suggested by Brinnand et al., see column 2, lines 23 – 25).

Regarding Claim 18, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" as a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60). Hoffman et al. do not disclose explicitly the method of claimed wherein the network configuration changes including network error rates. Brinnand et al. disclose the limitation of the method of claimed wherein the network configuration changes including network error rates (recited "the bit error rate in connection with transfer of message packets to and/or from particular locations in the network exceeds a predetermined threshold" as the

network configuration changes including network error rates; Fig. 2, column 4, lines 8 – 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoffman et al. to include the method of claimed wherein the network configuration changes including network error rates such as that taught by Brinnand et al. in order to facilitate the efficient logging of management information including information regarding events which occur in the network (as suggested by Brinnand et al., see column 2, lines 23 – 25).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. (US 6094435) and Brinnand et al. (US 6430616 B1) as applied to claims 1, 13, 20, 2, 3, 23, 4, 5, 21, 6, 22, 7, 8, 9, 10, 12, 14 15, 17, 19, 24, 16, 18 above, and further in view of of Aho (US 6185215 B1).

Regarding Claim 11, Hoffman et al. and Brinnand et al. do not disclose explicitly the protocol of traffic includes FTP. Aho discloses the limitation of the protocol of traffic including FTP (recited " file transfer including FTP" as the protocol of traffic including FTP; column 5, lines 55 – 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoffman et al. and Brinnand et al. to include a protocol of traffic includes FTP such as that taught by Aho in order to provide an improved method of using combined routing and switching devices used in local area and wide area computer networks (as suggested by Ado, see column 3, lines 31 – 33).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL May 16, 2006

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER